

Notice of Allowability

Application No.

10/779,926

Examiner

Vincent E. Kovalick

Applicant(s)

DEGROOT ET AL.

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to applicant's division application dated 2/17/04.
2. ☒ The allowed claim(s) is/are 117-121, 123-124 and 127-137 (re-numbered 1-18).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 2/17/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Response to Amendment

1. This Office Action is in response to Applicant's Divisional Patent Application, Serial No. 10/779,926, with a File Date of February 17, 2004.

In response to Applicant's Preliminary Amendment of February 17, 2004, claims 1-116 and 122, 125-126 are cancelled leaving claims 117-121, 123-124 and 127-137 still pending.

Examiner's Amendment

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

3. Authorization for this examiner's amendment was given in a telephone interview with Applicant's Attorney Mr. William O'Driscoll Reg. No. 33,294 in a telecon on January 23, 2007.

- o In claim 135, line 1; between the words "claim" and "wherein", please delete the numbers "113" and replace with the numbers ---134---
- o In claim 137, line 1; between the words "claim" and "wherein", please delete the numbers "115" and replace with the numbers ---136---

Allowable Subject Matter

4. Claims 117-121, 123-124 and 127-137 are allowed.

5. The following is an examiner's statement of reasons for allowance:

Relative to claims 117 and 120, the major difference between the teachings of the referenced prior art (USP 5,241,139, Gungl et al. and USP 5,796,389, Bertram et al.) and that of the instant invention is that said referenced prior art **does not teach** apparatus speeding up the reading of analog to digital converter signals to a touch screen comprising: means for reading a first coordinate of a coordinate pair at a first time; means for consecutively reading the same coordinate at a second time; means for determining if the absolute value of the difference between the first coordinate and the consecutive coordinate is less than a predetermined value; and means, response to the determining means, for quantifying the coordinate positions as a function of the first or the consecutive coordinate.

Regarding claims 127 and 130, the major difference between the teachings of the said referenced prior art and that of the instant invention is that said referenced prior art **does not teach** an apparatus eliminating noise from the reading of analog to digital converter signals to a touch screen comprising: means for reading a first coordinate of a coordinate pair at a first time; means for consecutively reading the same coordinate at a second time, means for determining if the absolute value of the difference between the first coordinate and the consecutive coordinate is less than a predetermined value; and means, response to the determining means, for quantifying the coordinate position as a function of the first or the consecutive coordinate.

Relative to claims 132 and 133, the major difference between the teachings of the said referenced prior art and that of the instant invention is that said referenced prior art

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does not teach a touch-screen display system for generating pixel coordinate estimates responsive to a user touching a display screen, an apparatus for enabling detection of a “no touch” state of said touch-screen display system comprising: at least one bus bar; at least one driver electrically connected to said at least one bus bar to selectively switch said at least one bus bar between at least two of a plurality of electrical potentials wherein the at least one drive is controlled to establish pre-determined discharge rates.

Regarding claims 134 and 136, the major difference between the teachings of the said referenced prior art and that of the instant invention is that said referenced prior art **does not teach** an apparatus determining whether or not a touch screen has been touched comprising: means for providing an analog to digital reading from an analog to digital converter; means for reading a maximum bit level; means for determining whether the reading is smaller than the maximum bit level; and means for determining the absence of a user touch if the reading is less than a maximum bit level.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

U. S. Patent No. 5,796,389 Bertram et al.

U. S. Patent No. 5,241,139 Gungl et al.

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To Respond

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent E. Kovalick whose telephone number is 571-272-7669. The examiner can normally be reached on Monday-Thursday 7:30- 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Vincent E. Kovalick

January 24, 2007



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